WE CLAIM:

1. A network switch for resolving requests from a plurality of host initiators by scheduling access to a plurality of disk storage devices, the network switch comprising:

(a) a switched fabric comprising a plurality of switching elements, each switching element comprising:

a plurality of bi-directional switched fabric ports; and

a control input connected to receive switch control data for selectively configuring the switching element in order to interconnect the bi-directional switched fabric ports;

(b) a memory for storing a routing and scheduling program; and

(c) a microprocessor, responsive to the requests, for executing the steps of the routing and scheduling program to generate the switch control data to transmit scheduled requests through the bi-directional switched fabric ports,

wherein:

at least one of the plurality of switching elements comprises a disk storage interface for connecting to a selected one of the disk storage devices;

the microprocessor for scheduling access to the plurality of disk storage devices through the disk storage interface;

the disk storage interface for receiving scheduling data from the selected one of the storage devices;

the memory for receiving the scheduling data via the bi-directional switched fabric ports of a selected number of the switching elements; and

the scheduling data is processed according to a priority such that the selected switching elements transfer the scheduling data through the bi-directional switched fabric ports before transferring data associated with the scheduled requests.

2. The network switch as recited in claim 1, wherein the at least one switching element further comprises a disk storage device connected to the disk storage interface.

3. The network switch as recited in claim 1, wherein:
(a) each disk storage device comprises a disk and a head; and
(b) the scheduling data comprises a radial location of the head relative to the disk within each disk storage device.

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4. The network switch as recited in claim 3, wherein the scheduling data further comprises a circumferential location of the head relative to the disk within each disk drive.

5. The network switch as recited in claim 1, wherein the switching elements further comprise a plurality of virtual lanes, wherein:
(a) at least one of the virtual lanes is reserved for transferring data associated with the scheduled requests;
(b) at least one of the virtual lanes is reserved for transferring the scheduling data; and
(c) the virtual lane for transferring the scheduling data comprises a higher priority than the virtual lane for transferring the data associated with the scheduled requests.

6. The network switch as recited in claim 1, wherein the scheduling data is communicated to the memory through the bi-directional switched fabric ports according to an isochronous protocol.

7. A method of resolving requests from a plurality of host initiators by scheduling access to a plurality of disk storage devices connected to a network switch, the network switch comprising a switched fabric comprising a plurality of switching elements, the method comprising the steps of:

(a) transmitting through the switching elements scheduling data from the plurality of disk storage devices to a memory;

(b) evaluating the scheduling data in order to schedule the requests from the host initiators; and

(c) transmitting data associated with the scheduled requests through the switching elements to the plurality of disk storage devices,

wherein the scheduling data is processed according to a priority such that the switching elements transfer the scheduling data before transferring data associated with the scheduled requests.

8. The method as recited in claim 7, wherein:

(a) each disk storage device comprises a disk and a head; and

(b) the scheduling data comprises a radial location of the head relative to the disk within each disk storage device.

9. The method as recited in claim 8, wherein the scheduling data further comprises a circumferential location of the head relative to the disk within each disk drive.

10. The method as recited in claim 7, wherein the switching elements further comprise a plurality of virtual lanes, wherein:

(a) at least one of the virtual lanes is reserved for transferring data associated with the scheduled requests;

(b) at least one of the virtual lanes is reserved for transferring the scheduling data; and

(c) the virtual lane for transferring the scheduling data comprises a higher priority than the virtual lane for transferring the data associated with the scheduled requests.

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11. The method as recited in claim 7, wherein the scheduling data is communicated to the memory through the switching elements according to an isochronous protocol.